Connecticut Science Frameworks

The University of Rhode Island W. Alton Jones Campus School Field Trip lessons and activities aim to meet the following Connecticut Science Frameworks:

Natural Science

Forest Ecology
Science
Grade 1 Science Content Standard 1.2
Living things have different structures and behaviors that allow them to meet their basic needs.
Grade 1 Science Content Standard 1.3
Organisms change in form and behavior as part of their life cycles.
Grade 2 Science Content Standard 2.2
Plants change their forms as part of their life cycles.
Grade 3 Science Content Standard 3.2
Organisms can survive and reproduce only in environments that meet their basic needs.
Grade 3 Science Content Standard 3.4
Earth materials provide resources for all living things, but these resources are limited and should be conserved.
Grade 4 Science Content Standard 4.2
All organisms depend on the living and non-living features of the environment for survival.
Grade 6 Science Content Standard 6.2
An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.
Grade 9 Science Content Standard 9.9
Some materials can be recycled, but others accumulate in the environment and may affect the balance of the Earth systems.

Wetland Ecology
Science
Grade 1 Science Content Standard 1.2
Living things have different structures and behaviors that allow them to meet their basic needs.
Grade 1 Science Content Standard 1.3
Organisms change in form and behavior as part of their life cycles.
Grade 3 Science Content Standard 3.2
Organisms can survive and reproduce only in environments that meet their basic needs.
Grade 3 Science Content Standard 3.4
Earth materials provide resources for all living things, but these resources are limited and should be conserved.
Grade 4 Science Content Standard 4.2
All organisms depend on the living and non-living features of the environment for survival.
Grade 4  Science Content Standard 4.3
Water has a major role in shaping the Earth’s surface.

Grade 5  Science Content Standards 5.2
Perceiving and responding to information about the environment is critical to the survival of organisms.

Grade 6  Science Content Standard 6.2
An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.

Grade 6  Science Content Standards 6.4
Water moving across and through earth materials carries with it the products of human activities.

Mathematics
Grade 2  Numerical and Proportional Reasoning
3.3 Develop and apply units, systems, formulas and appropriate tools to estimate and measure.

Grade 4  Geometry and Measurement
3.3 Develop and apply units, systems, formulas and appropriate tools to estimate and measure.

Grade 5  Geometry and Measurement
3.3 Develop and apply units, systems, formulas and appropriate tools to estimate and measure.

Grade 6  Geometry and Measurement
3.3 Develop and apply units, systems, formulas and appropriate tools to estimate and measure.

Wildlife Ecology

Science
Grade 1  Science Content Standard 1.2
Living things have different structures and behaviors that allow them to meet their basic needs.

Grade 1  Science Content Standard 1.3
Organisms change in form and behavior as part of their life cycles.

Grade 3  Science Content Standard 3.2
Organisms can survive and reproduce only in environments that meet their basic needs.

Grade 3  Science Content Standard 3.4
Earth materials provide resources for all living things, but these resources are limited and should be conserved.

Grade 4  Science Content Standard 4.2
All organisms depend on the living and non-living features of the environment for survival.

Grade 5  Science Content Standards 5.2
Perceiving and responding to information about the environment is critical to the survival of organisms.

Grade 6  Science Content Standard 6.2
An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.

Grade 10  Science Content Standard 10.6
Living organisms have the capability of producing populations of unlimited size, but the environment can support only a limited number of individuals from each species.

**Winter Ecology**

*Science*

**Grade 1**  *Science Content Standard 1.1*
The sun appears to move across the sky in the same way every day, but its path changes gradually over the seasons.

**Grade 4**  *Science Content Standard 4.2*
All organisms depend on the living and non-living features of the environment for survival.

**Grade 6**  *Science Content Standard 6.2*
An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.

**Grade 6**  *Science Content Standard 6.3*
Variations in the amount of the sun’s energy hitting the Earth’s surface affect daily and seasonal weather patterns.

**Geology**

*Science*

**Grade 3**  *Science Content Standard 3.3*
Earth materials have different physical and chemical properties.

**Grade 3**  *Science Content Standard 3.4*
Earth materials provide resources for all living things, but these resources are limited and should be conserved.

**Grade 4**  *Science Content Standard 4.3*
Water has a major role in shaping the Earth’s surface.

**Grade 7**  *Science Content Standard 7.3*
Landforms are the result of the interaction of constructive and destructive forces over time.

**Grade 9**  *Science Content Standard 9.3*
Various sources of energy are used by humans and all have advantages and disadvantages.

**Grade 9**  *Science Content Standard 9.9*
Some materials can be recycled, but others accumulate in the environment and may affect the balance of the Earth systems.

**Predator/Prey**

*Science*

**Grade 1**  *Science Content Standard 1.2*
Living things have different structures and behaviors that allow them to meet their basic needs.

**Grade 3**  *Science Content Standard 3.2*
Organisms can survive and reproduce only in environments that meet their basic needs.

**Grade 4**  *Science Content Standard 4.2*
All organisms depend on the living and non-living features of the environment for survival.

Grade 5  Science Content Standards 5.2
Perceiving and responding to information about the environment is critical to the survival of organisms.

Grade 6  Science Content Standard 6.2
An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.

Grade 9  Science Content Standard 9.3
Various sources of energy are used by humans and all have advantages and disadvantages.

Grade 9  Science Content Standard 9.8
The use of resources by human populations may affect the quality of the environment.

Grade 10  Science Content Standard 10.6
Living organisms have the capability of producing populations of unlimited size, but the environment can support only a limited number of individuals from each species.
Social Science

Archaeology

Science
Grade 5
Science Content Standard - 5.4
Humans have the capacity to build and use tools to advance the quality of their lives.

Social Studies
K-12
Social Studies Standard 1 – Content Knowledge
1.4 Demonstrate an understanding of geographical space and place.
Describe the interactions of humans and the environment.

Living History

Science
Grade 5
Science Content Standard 5.4
Humans have the capacity to build and use tools to advance the quality of their lives.

Social Studies
K-12
Social Studies Standard 1 – Content Knowledge
1.2 Describe the importance of significant events in local and Connecticut history and their connections to United States history.
1.11 Know how different economic systems organize resources.

Early American History

Science
Grade 5
Science Content Standard 5.4
Humans have the capacity to build and use tools to advance the quality of their lives.

Social Studies
K-12
Social Studies Standard 1 – Content Knowledge
1.2 Describe the importance of significant events in local and Connecticut history and their connections to United States history.
1.11 Know how different economic systems organize resources.
Living things have different structures and behaviors that allow them to meet their basic needs.

Organisms change in form and behavior as part of their life cycles.

Plants change their forms as part of their life cycles.

Human beings, like all other living things, have special nutritional needs for survival.

Earth materials provide resources for all living things, but these resources are limited and should be conserved.

All organisms depend on the living and non-living features of the environment for survival.

Humans have the capacity to build and use tools to advance the quality of their lives.

The use of resources by human populations may affect the quality of the environment.
**Group Building**

**Health Education**

K-12  Health Education:  Content Standard 5 Communication Skills

E.5.1. Practice verbal and nonverbal communication as a means of enhancing health

E.5.2. Demonstrate characteristics needed to be a responsible individual within their group, school, family and community

E.5.6. Demonstrate active listening skills to build and maintain healthy relationships with peers and family members

E.5.8. Identify possible causes of conflict

M.5.1. Apply effective verbal and nonverbal communication skills as a means of enhancing health

M.5.2. Use characteristics needed to be a responsible individual within their peer group, school, family and community

M.5.3. Identify ways in which emotions may affect communication, behavior and relationships

M.5.4. Compare and contrast healthy ways to express needs, wants and feelings

M.5.9. Demonstrate strategies to prevent, manage and resolve conflicts in healthy ways and identify adults and peers who might assist, when appropriate

H.5.1. Compare and contrast skills for communicating effectively with family, peers and others

H.5.2. Apply and evaluate characteristics needed to be a responsible individual within their peer group, school, family and community

H.5.4. Analyze situations and demonstrate healthy ways to express needs, wants and feelings

H.5.9. Demonstrate strategies used to prevent, manage and resolve conflict in healthy ways and identify adults and peers and community resources that might assist, when appropriate

**Physical Education Content Standard 9:  Motor Skill Performance**

E.9.5. Participate in a variety of modified games, developmentally appropriate tasks, activities, creative movement, dance and play

M.9.2. Demonstrate developmentally mature applications combining locomotor, nonlocomotor and manipulative skills to participate in developmentally appropriate movement and fitness activities

M.9.5. Participate in a variety of individual, dual and team tasks, activities, creative movement, dance, play, games and sports

H (high).9.1. Maintain and further develop the fundamental movement skills in open environments

H.9.2. Demonstrate competence in applying basic locomotor, nonlocomotor and manipulative skills in the execution of more complex skills

H.9.5. Participate in a wide variety of activities, including dance, games, sports and lifetime physical activities

**Physical Education**

K-12  Physical Education Content Standard 10:  Applying Concepts and Strategies
E.10.2. Recognize critical performance skill elements in self and others using movement vocabulary
E.10.3. Demonstrate knowledge of rules, safety practices and procedures of specific activities
M.10.2. Use self, peer, teacher and technological resources to recognize and suggest performance improvements in self and others
M.10.3. Demonstrate knowledge of rules, safety practices and procedures as they apply to an increasing range of movement situations
H.10.2. Use self, peer, teacher and technological resources as tools to implement performance improvements in self and others
H.10.3. Demonstrate understanding of how rules, and safety practices and procedures need to be adjusted for different movement situations

K-12 Physical Education Content Standard 13: Responsible Behavior
E.13.1. Understand, participate in the development of, and follow classroom rules; follow activity-specific rules, safety practices and procedures; and demonstrate etiquette and good sportsmanship in a variety of physical activity settings
E.13.2. Work independently or cooperatively and productively with partners or in small groups to complete assigned tasks
E.13.4. Develop skills needed for resolving conflicts peacefully
M.13.1. Understand, participate in the development of, and follow classroom rules; follow activity-specific rules, safety practices and procedures; and apply safe practices, rules, procedures, etiquette and good sportsmanship in all physical activity settings
M.13.2. Continue to develop skills to participate productively in groups, in both cooperative and competitive activities
M.13.3. Develop strategies for including all persons, despite individual differences, in physical activity settings
M.13.4. Apply appropriate skills for resolving conflicts peacefully
H.13.1. Apply safe practices, rules, procedures, etiquette and good sportsmanship in all physical activity settings, and take initiative to encourage others to do the same
H.13.2. Demonstrate leadership and cooperation in order to accomplish the goals of different physical activities
H.13.3. Develop and demonstrate initiative in implementing strategies for including all persons, despite individual differences, in physical activity settings
H.13.4. Demonstrate initiative in using appropriate skills for resolving conflicts peacefully and encouraging others to do the same

Challenge Course

Health Education
K-12 Health Education: Content Standard 5 Communication Skills
E.5.1. Practice verbal and nonverbal communication as a means of enhancing health
E.5.2. Demonstrate characteristics needed to be a responsible individual within their group, school, family and community
E.5.6. Demonstrate active listening skills to build and maintain healthy relationships with peers and family members.

E.5.8. Identify possible causes of conflict.

M.5.1. Apply effective verbal and nonverbal communication skills as a means of enhancing health.

M.5.2. Use characteristics needed to be a responsible individual within their peer group, school, family, and community.

M.5.3. Identify ways in which emotions may affect communication, behavior, and relationships.

M.5.4. Compare and contrast healthy ways to express needs, wants, and feelings.

M.5.9. Demonstrate strategies to prevent, manage, and resolve conflicts in healthy ways and identify adults and peers who might assist, when appropriate.

H.5.1. Compare and contrast skills for communicating effectively with family, peers, and others.

H.5.2. Apply and evaluate characteristics needed to be a responsible individual within their peer group, school, family, and community.

H.5.4. Analyze situations and demonstrate healthy ways to express needs, wants, and feelings.

H.5.9. Demonstrate strategies used to prevent, manage, and resolve conflict in healthy ways and identify adults and peers and community resources that might assist, when appropriate.

Physical Education

K-12 Physical Education Content Standard 9: Motor Skill Performance

E.9.5. Participate in a variety of modified games, developmentally appropriate tasks, activities, creative movement, dance, and play.

M.9.2. Demonstrate developmentally mature applications combining locomotor, nonlocomotor, and manipulative skills to participate in developmentally appropriate movement and fitness activities.

M.9.5. Participate in a variety of individual, dual, and team tasks, activities, creative movement, dance, play, games, and sports.

H (high).9.1. Maintain and further develop the fundamental movement skills in open environments.

H.9.2. Demonstrate competence in applying basic locomotor, nonlocomotor, and manipulative skills in the execution of more complex skills.

H.9.5. Participate in a wide variety of activities, including dance, games, sports, and lifetime physical activities.

K-12 Physical Education Content Standard 10: Applying Concepts and Strategies


E.10.3. Demonstrate knowledge of rules, safety practices, and procedures of specific activities.

M.10.2. Use self, peer, teacher, and technological resources to recognize and suggest performance improvements in self and others.

M.10.3. Demonstrate knowledge of rules, safety practices, and procedures as they apply to an increasing range of movement situations.
H.10.2. Use self, peer, teacher and technological resources as tools to implement performance improvements in self and others

H.10.3. Demonstrate understanding of how rules, and safety practices and procedures need to be adjusted for different movement situations

K-12 Physical Education Content Standard 13: Responsible Behavior

E.13.1. Understand, participate in the development of, and follow classroom rules; follow activity-specific rules, safety practices and procedures; and demonstrate etiquette and good sportsmanship in a variety of physical activity settings

E.13.2. Work independently or cooperatively and productively with partners or in small groups to complete assigned tasks

E.13.4. Develop skills needed for resolving conflicts peacefully

M.13.1. Understand, participate in the development of, and follow classroom rules; follow activity-specific rules, safety practices and procedures; and apply safe practices, rules, procedures, etiquette and good sportsmanship in all physical activity settings

M.13.2. Continue to develop skills to participate productively in groups, in both cooperative and competitive activities

M.13.3. Develop strategies for including all persons, despite individual differences, in physical activity settings

M.13.4. Apply appropriate skills for resolving conflicts peacefully

H.13.1. Apply safe practices, rules, procedures, etiquette and good sportsmanship in all physical activity settings, and take initiative to encourage others to do the same

H.13.2. Demonstrate leadership and cooperation in order to accomplish the goals of different physical activities

H.13.3. Develop and demonstrate initiative in implementing strategies for including all persons, despite individual differences, in physical activity settings

H.13.4. Demonstrate initiative in using appropriate skills for resolving conflicts peacefully and encouraging others to do the same

**Outdoor Skills**

**Science**

**Grade 2** Science Content Standard 2.4

Human beings, like all other living things, have special nutritional needs for survival.

**Grade 3** Science Content Standard 3.2

Organisms can survive and reproduce only in environments that meet their basic needs.

**Grade 4** Science Content Standard 4.2

All organisms depend on the living and non-living features of the environment for survival.

**Grade 5** Science Content Standards 5.2

Perceiving and responding to information about the environment is critical to the survival of organisms.

**Orienteering**

**Social Studies**
K-12 Social Studies Standard 2—History/Social Studies Literacy
Access and gather information from a variety of primary and secondary sources (maps, charts, graphs, images, and print materials).
Interpret information from a variety of primary and secondary sources (maps, charts, graphs, images and print materials).
Evening Programs

Night Hike
Night Sky

Science
Grade 1  Science Content Standard 1.1
The sun appears to move across the sky in the same way every day, but its path changes gradually over the seasons.
Grade 5  Science Content Standards 5.3
Most objects in the solar system are in a regular and predictable motion.
Grade 8  Science Content Standards 8.3
The solar system is composed of planets and other objects that orbit the sun.

Campfire
Paper Bag Skits
Egg Drop
The Mysterious Thing
New Games
Nature Quiz
Science
Grade 1  Science Content Standard 1.2
Living things have different structures and behaviors that allow them to meet their basic needs.
Grade 3  Science Content Standard 3.2
Organisms can survive and reproduce only in environments that meet their basic needs.
Grade 4  Science Content Standard 4.2
All organisms depend on the living and non-living features of the environment for survival.
Grade 6  Science Content Standard 6.2
An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.
Grade 9  Science Content Standard 9.3
Various sources of energy are used by humans and all have advantages and disadvantages.

Town Meeting
Science
Grade 3  Science Content Standard 3.4
Earth materials provide resources for all living things, but these resources are limited and should be conserved.
Grade 5  Science Content Standards 5.2
Perceiving and responding to information about the environment is critical to the survival of organisms.
Grade 9  Content Standard 9.8
The use of resources by human populations may affect the quality of the environment.
Underground Railroad
Social Studies
K-12 Social Studies Standard 1 – Content Knowledge
1.2 Describe the importance of significant events in local and Connecticut history and their connections to United States history.
K-12 Social Studies Standard 2—History/Social Studies Literacy
Access and gather information from a variety of primary and secondary sources (maps, charts, graphs, images, and print materials).
Interpret information from a variety of primary and secondary sources (maps, charts, graphs, images and print materials).